

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF FINANCIAL ASSISTANCE
PRELIMINARY FUNDING COMMITMENT (PFC)
CLEAN BEACHES INITIATIVE (CBI) GRANT PROGRAM
FAAST PIN: 27681

RECIPIENT: Heal the Bay

PROJECT TITLE: PREDICTIVE MODELS OF BEACH WATER QUALITY: PHASE 2 PILOT IMPLEMENTATION (PROJECT)

TOTAL PROJECT COST: \$281,489

TOTAL CBI GRANT REQUEST: \$281,489

GRANT MANAGER: Andrew Tsiu, Environmental Scientist (916-319-9123 or Andrew.Tsiu@Waterboards.ca.gov)

AUTHORITY

The Clean Beaches Initiative (CBI) Grant Program provides funding for projects that restore and protect the water quality and the environment of coastal waters, estuaries, bays and near shore waters. The CBI Grant Program was initiated in response to the poor water quality and significant exceedances of bacterial indicators revealed by Assembly Bill (AB) 411 monitoring at California's beaches. Funding is available from the *Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act* (Proposition 84). In addition, there are unused or re-appropriated funds remaining from the *California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002* (Proposition 40) and the *Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002* (Proposition 50).

The State Water Board adopted Resolution No. 2012-0020 on June 5, 2012, which revised the CBI Guidelines used to solicit applications, evaluate proposals, and award grants for Proposition 84, Chapter 7 funds, and any unused or re-appropriated Proposition 40 and 50 CBI funds. The resolution authorized the Deputy Director of the Division of Financial Assistance (Division) to approve proposed projects, execute grant agreements and amendments to implement the proposed projects and utilize funds from projects which are withdrawn or completed under budget to fund additional projects recommended by the Clean Beaches Task Force (CBTF), or augment the scope and budget of projects previously awarded.

Heal the Bay, a non-profit organization, submitted an application for funding this Project through the Proposition 84 CBI Grant Program in January 2009. The proposed project met the specific CBI program research priority listed in the Guidelines for that Solicitation, to design and test a predictive model for public notification of water quality conditions at California beaches. However, due to a freeze imposed on bond-funded grant projects in December 2008, the grant Solicitation was closed and the application was not reviewed or recommended for approval at that time. The State Water Board determined that the Project met the Proposition 84 CBI priorities and was consistent with the 2005-2006 Consolidated Grants Program Guidelines, which included the Coastal Nonpoint Source funds. The State Water Board adopted Resolution No. 2012-0003 on January 10, 2012, to commit \$305,090 from Proposition 50 Coastal Non-Point Source Grant funds to conduct Phase I of this project. The resolution authorized the Deputy Director of the Division to execute the Grant and any amendments to implement the Project. Agreement No. 11-106-550 was executed to complete the Project, and Heal the Bay is nearing completion of the work elements.

Heal the Bay has proposed to complete a second phase to this Project. The Phase II application for this Project was submitted to FFAST on June 18, 2014 and it has been determined to be complete. Given that the original Project was consistent with the CBI Guidelines in 2009, and that Resolution No. 2012-0020 authorizes the Deputy Director of the Division to augment the scope and budget of projects previously awarded, the Division proposes to add CBI funding to complete Phase II of the Project. This PFC shall be posted on the State Water Board's internet website, and circulated to the CBTF for review and comment prior to the Deputy Director augmenting the scope and budget to Agreement No. 11-106-550.

PROJECT OBJECTIVE

Phase I of the Project developed and tested predictive models of water quality at California marine beaches. The goal was to use data on fecal indicator bacteria (FIB) concentrations, and oceanic and atmospheric conditions (i.e., tides, waves, water temperature, wind direction, etc) to develop simple models for 25 different California beaches that predict when beaches are in and out-of compliance with water quality standards. The results of Phase I clearly showed that models can improve public notification at California beaches.

The Phase II Project will pilot water quality forecasting models at two to four California beaches as part of the local beach monitoring and public notification program. The proposed work is direct follow-up to the Phase I Project. This pilot project will include working with local beach managers to identify pilot beaches, develop protocols for using forecast models, and create a public notification program. It will also include public outreach and recommendations for implementing forecasting models throughout California. Optimization of all promising models from Phase I of this project will be completed.

PROJECT DESCRIPTION

The proposed work builds upon the work completed in Phase I in which predictive models were developed for 25 California Beaches by piloting the successful forecast models at two to four beaches in California as a proof-of-concept project to help guide local health managers in the use of forecast models in their current programs. The project will continue to optimize the forecast models for 25 beaches in California to increase sensitivity to beach closures, pilot the beach water quality forecast models during summer the summer beach season, develop forecast model implementation protocols that can be used by local beach managers and health agencies throughout California to integrate forecast models into existing monitoring and public notification programs, and to develop a public notification program that can be used by local beach managers and health agencies throughout California to communicate the results of forecast models to the public. This project will provide specific recommendations for implementing forecast models at beaches throughout California, and will include an analysis of the pilot results compared to the current sample-based method; a summary of resources needed to maintain forecast models for a single beach; and economies of scale that are possible for maintaining models for beaches throughout the state.

The total eligible cost of the Phase II Project is \$281,489. Heal the Bay requested a CBI grant amount of \$281,489 for the Project.

ENVIRONMENTAL IMPACT

For Phase I, the State Water Board has filed a Notice of Exemption (NOE) for CEQA compliance at the State Clearing House on July 3, 2012. Phase II also meets the following exemptions:

Section 15306: Class 6 Information Collection - Basic data collection and research with no disturbance to an environmental resource. No environmental impacts are expected a result of this project.

FISCAL IMPACT

As of July 1, 2013, the cumulative balance available for the CBI Grant Program funded by Proposition 40, 50, and 84 is:

July 1, 2013:	\$49,520,820
Fiscal Year 2013-2014 Approved PFCs	\$12,779,709
Draft PFCs (proposed commitments):	--
Heal the Bay - FFAST PIN: 27681	<u>\$281,489</u>
Funds Remaining for Future Commitments:	\$36,459,622

REGIONAL WATER BOARD IMPACT

The Project does not directly impact a Regional Water Board. The State Water Board's Division of Water Quality Supports the Project.

ROUTINE, NON-CONTROVERSIAL PROJECT

The proposed Project is routine and non-controversial based on Division staff's consideration of the documents and information provided by Heal the Bay, regulatory agencies, and written responses from the general public. There has been no indication of a protest or controversy regarding the proposed Project.

PUBLIC REVIEW

The PFC was posted on the State Water Board's internet website for public review on _____.

APPROVAL

Using the authority delegated by the State Water Resources Control Board on June 5, 2012, in Resolution No. 2012-0020, I hereby:

Approve a Clean Beaches Initiative Grant Program Preliminary Funding Commitment of \$281,489 for Heal the Bay's Predictive Models of Beach Water Quality: Phase 2 Pilot Implementation.

Darrin Polhemus, Deputy Director
State Water Resources Control Board
Division of Financial Assistance

Date

Reviewed by:
Office of Chief Counsel
Date: